

Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) **EP 1 081 627 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
10.10.2001 Bulletin 2001/41

(51) Int Cl.7: **G06F 19/00**

(43) Date of publication A2:  
07.03.2001 Bulletin 2001/10

(21) Application number: **00307194.1**

(22) Date of filing: **22.08.2000**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE**  
Designated Extension States:  
**AL LT LV MK RO SI**

(72) Inventors:  
• **Koritzinsky, Ianne Mae Howards**  
**Glendale, Wisconsin 53209 (US)**  
• **Braunstein, Michael James**  
**Milwaukee, Wisconsin 53202 (US)**

(30) Priority: **03.09.1999 US 390016**

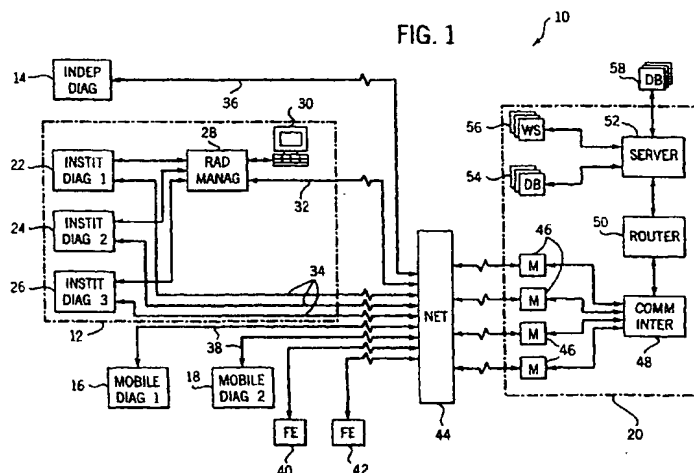
(71) Applicant: **GENERAL ELECTRIC COMPANY**  
**Schenectady, NY 12345 (US)**

(74) Representative: **Goode, Ian Roy et al**  
**GE LONDON PATENT OPERATION,**  
**Essex House,**  
**12/13 Essex Street**  
**London WC2R 3AA (GB)**

(54) **Medical diagnostic system service connectivity method and apparatus**

(57) A technique is provided for verifying network connectivity between a medical diagnostic system (12, 14, 16, 18, 22, 24, 26) and a remote service facility (20). The remote service facility (20) is contactable at will by the subscribing system to request service, information, technical assistance, and so forth, while the service facility may also contact the subscribing system for acquisition of data, transmission of service messages, protocols, and so forth. In the connectivity verification sequence, a subscribing system (12, 14, 16, 18, 22, 24, 26) is selected by the service facility and a network con-

nection (44) is established. A message is transmitted to the system provoking software at the system to re-establish the network connection from the system side. Two-way connectivity is thereby verified. Mobile systems (16, 18) may be configured to contact the service facility at their own initiation, and exchange data for permitting the service facility to re-contact the mobile system. Failure modes may be identified at various locations in the connectivity network by identification of steps in the connectivity verification process where the process failed. Alerts or other action items may be generated as a result of detected connectivity problems.





European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 00 30 7194

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 5 943 391 A (NORDLING KARL INGMAR) 24 August 1999 (1999-08-24) * column 1, line 34 - line 52 * * column 2, line 15 - line 42 * * column 3, line 14 - line 43 * * column 4, line 21 - line 50 * * column 4, line 60 - line 67 * * column 5, line 44 - column 6, line 63 * ---	1-10	G06F19/00
X	US 5 818 904 A (DEAN MATTHEW T) 6 October 1999 (1999-10-06) * column 2, line 49 - column 3, line 31 * * column 4, line 33 - column 5, line 29 * ---	1-10	
A	DE 37 23 115 C (TELENORMA TELEFONBAU UND NORMALZEIT GMBH, 6000 FRANKFURT, DE) 16 March 1989 (1989-03-16) * column 2, line 15 - column 3, line 56 * ---	1-10	
A	US 5 077 782 A (BUSHUE CARL J ET AL) 31 December 1991 (1991-12-31) * column 1, line 60 - column 2, line 49 * ---	1-10	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
A	US 5 796 953 A (ZEY DAVID A) 18 August 1998 (1998-08-18) * column 2, line 10 - line 44 * * column 3, line 21 - line 61 * * column 4, line 1 - line 62 * * column 5, line 17 - line 58 * ---	1-10	G06F H04M H04L
-/-			
The present search report has been drawn up for all claims			
Place of search <b>MUNICH</b>		Date of completion of the search <b>8 August 2001</b>	Examiner <b>Barba, M</b>
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

EPO FORM 1503 C3.02 (P4/C01)



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 00 30 7194

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	<p>SOEHLKE K ET AL: "Interfacing a radiology information system and a picture archiving and communication system"</p> <p>IEEE PACIFIC RIM CONFERENCE ON COMMUNICATIONS, COMPUTERS AND SIGNAL PROCESSING (CAT. NO.91CH2954-6), VICTORIA, BC, CANADA, 9-10 MAY 1991, pages 729-732 vol.2, XP002174370 1991, New York, NY, USA, IEEE, USA ISBN: 0-87942-638-1</p> <p>* page 730, right-hand column, line 48 - page 732, right-hand column, line 4 *</p>	1-10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search <b>MUNICH</b>		Date of completion of the search <b>8 August 2001</b>	Examiner <b>Barba, M</b>
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.82 (P04C01)

BEST AVAILABLE COPY

# **ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.**

EP 00 30 7194

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-08-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5943391 A	24-08-1999	AU 7954498 A WO 9857486 A	30-12-1998 17-12-1998
US 5818904 A	06-10-1998	DE 19744412 A GB 2320395 A, B	16-04-1998 17-06-1998
DE 3723115 C	16-03-1989	NONE	
US 5077782 A	31-12-1991	NONE	
US 5796953 A	18-08-1998	NONE	

EPO FORM P459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82